IN THE CLAIMS:

Please substitute the following claims for the same-numbered claims in the application:

1. (Original) An extreme ultraviolet lithography mask comprising:

an ultraviolet reflective region; and

an ultraviolet scattering region,

wherein said reflective region and said scattering region are comprised of a same material.

2. (Original) The mask of claim 1, wherein said reflective region comprises a reflective multilayer comprising molybdenum and silicon, and wherein said multilayer comprises a flat surface configured to reflect incoming radiation waves for printing a semiconductor wafer.

3. (Original) The mask of claim 1, wherein said scattering region comprises a multilayer comprising molybdenum and silicon, and wherein said multilayer comprises a sloped surface configured at an angle to deflect incoming ultraviolet radiation waves to prevent collection by exposure optics and to prevent printing onto a semiconductor wafer.

4. (Original) The mask of claim 3, wherein said angle is greater than a collection angle of said exposure optics.

5. (Original) The mask of claim 1, wherein said scattering region comprises a roughened surface configured to deflect incoming ultraviolet radiation waves to prevent collection by exposure optics and to prevent printing onto a semiconductor wafer.

6. (Original) The mask of claim 1, wherein said scattering region comprises jagged surfaces configured to deflect incoming ultraviolet radiation waves to prevent collection by exposure optics and to prevent printing onto a semiconductor wafer.

7. (Original) The mask of claim 1, wherein said scattering region comprises a curved surface configured to deflect incoming ultraviolet radiation waves to prevent collection by exposure optics and to prevent printing onto a semiconductor wafer.

8. (Original) A radiation scattering reflective mask comprising:

an ultra low expansion substrate;

a crystalline silicon layer adjacent to said ultra low expansion substrate; and

a multilayer comprising molybdenum and silicon adjacent to said crystalline silicon layer, wherein said multilayer comprises a surface having level portions and uneven portions.

9. (Original) The mask of claim 8, wherein said uneven portions comprise sloped configurations arranged at an angle to deflect incoming ultraviolet radiation waves to prevent collection by exposure optics and to prevent printing onto a semiconductor wafer.

10. (Original) The mask of claim 9, wherein said crystalline silicon layer comprises a sloped surface, wherein said sloped surface of said crystalline silicon layer is aligned with said sloped configuration of said uneven portion.

11. (Original) The mask of claim 9, wherein said angle is greater than approximately 54 degrees from normal.

12. (Original) The mask of claim 8, wherein said level portions are configured to reflect incoming ultraviolet radiation waves for printing a semiconductor wafer.

13. (Original) The mask of claim 8, wherein said multilayer layer reflects radiation.

14. (Original) The mask of claim 8, wherein said multilayer scatters light on said uneven portions.

15. (Original) The mask of claim 8, wherein said uneven portions comprise a roughened surface configured to deflect incoming ultraviolet radiation waves to prevent collection by exposure optics and to prevent printing onto a semiconductor wafer.

16. (Original) The mask of claim 8, wherein said uneven portions comprise jagged surfaces configured to deflect incoming ultraviolet radiation waves to prevent collection by exposure optics and to prevent printing onto a semiconductor wafer.

17. (Original) The mask of claim 8, wherein said uneven portions comprise curved surfaces configured to deflect incoming ultraviolet radiation waves to prevent collection by exposure optics and to prevent printing onto a semiconductor wafer.

18. (Original) An extreme ultraviolet lithography mask comprising:

a substrate;

a crystalline silicon layer over said substrate; and

a multilayer comprising molybdenum and silicon over said crystalline silicon layer, wherein said multilayer comprises a reflective region and a scattering region.

19. (Original) The mask of claim 18, wherein said substrate comprises an ultra low expansion substrate.

20. (Original) The mask of claim 18, wherein said scattering region comprises surfaces having sloped configurations arranged at an angle to deflect incoming ultraviolet radiation waves to avoid collection by exposure optics and to prevent printing onto a semiconductor wafer.

21. (Original) The mask of claim 20, wherein said crystalline silicon layer comprises sloped surfaces, wherein said sloped surfaces of said crystalline silicon layer are aligned with said sloped configuration of said surfaces of said scattering region.

22. (Original) The mask of claim 20, wherein said angle is approximately 54 degrees from normal.

23. (Original) The mask of claim 18, wherein said reflective region is configured to reflect incoming radiation waves for printing a semiconductor wafer.

24. (Original) The mask of claim 18, wherein said scattering regions comprise roughened surfaces configured to deflect incoming ultraviolet radiation waves to avoid collection by exposure optics and to prevent printing onto a semiconductor wafer.

25. (Original) The mask of claim 18, wherein said scattering region comprises jagged surfaces configured to deflect incoming radiation waves to avoid collection by exposure optics and to prevent printing onto a semiconductor wafer.

26. (Original) The mask of claim 18, wherein said scattering region comprises curved surfaces configured to deflect incoming ultraviolet radiation waves to avoid collection by exposure optics and to prevent printing onto a semiconductor wafer.

27. (Original) A method of forming an extreme ultraviolet lithography mask, said method comprising:

bonding a crystalline silicon layer adjacent to a substrate; and

forming a multilayer comprising molybdenum and silicon adjacent to said crystalline

silicon layer,

wherein said multilayer comprises surface having level portions and uneven portions.

28. (Original) The method of claim 27, wherein said crystalline silicon layer is anodically bonded to said substrate.

29. (Original) The method of claim 27, wherein prior to said step of forming a multilayer, said method further comprises:

depositing a hardmask over said crystalline silicon layer;

depositing a photoresist mask over said hardmask;

creating a pattern in said photoresist mask; and

transferring said pattern to said hardmask.

30. (Original) The method of claim 29, further comprising:

etching said crystalline silicon layer to produce uneven surfaces in etched regions of said crystalline silicon layer; and

removing said hardmask.

31. (Original) The method of claim 29, wherein said pattern is transferred to said hardmask using a plasma etch.

32. (Original) The method of claim 30, wherein said etching of crystalline silicon layer

comprises an anisotropic silicon wet etch.

33. (Original) The method of claim 32, wherein said wet etch is performed using an alkaline solution.

34. (Original) The method of claim 27, wherein said substrate is formed of an ultra low expansion substrate.

35. (Original) The method of claim 30, wherein said etching is performed along <100> lattice planes of said crystalline silicon layer.

36. (Original) The method of claim 27, wherein said multilayer reflects radiation and scatters light.

37. (Original) The method of claim 27, wherein said level portions are configured to reflect incoming ultraviolet radiation waves for printing onto a semiconductor wafer.

38. (Original) The method of claim 27, wherein said uneven portions comprise sloped surfaces conformal to the underlying crystalline silicon layer, wherein said sloped surfaces are configured at an angle to deflect incoming extreme ultraviolet radiation waves to avoid collection by exposure optics and to prevent printing onto a semiconductor wafer.

39. (Original) The method of claim 38, wherein said angle is approximately 54 degrees from normal.

40. (Original) The method of claim 27, further comprising configuring said uneven portions to have a roughened surface to deflect incoming ultraviolet radiation waves to avoid collection by exposure optics and to prevent printing onto a semiconductor wafer.

41. (Original) The method of claim 27, further comprising configuring said uneven portions to have jagged surfaces to deflect incoming ultraviolet radiation waves to avoid collection by exposure optics and to prevent printing onto a semiconductor wafer.

42. (Original) The method of claim 27, further comprising configuring said uneven portions to have curved surfaces to deflect incoming radiation waves to avoid collection by exposure optics and to prevent printing onto a semiconductor wafer.

43. (Original) A method of forming an extreme ultraviolet lithography mask, said method comprising:

forming reflective regions on surfaces of said mask; and

forming scattering regions on said surfaces of said mask,

wherein said reflective regions and said scattering regions comprise a same material.

44. (Original) The method of claim 43, wherein in said step of forming reflective regions,

said reflective regions are formed of a multilayer comprising molybdenum and silicon, and wherein said multilayer comprises a flat surface configured to reflect incoming radiation for collection by exposure optics and for printing onto a semiconductor wafer.

45. (Original) The method of claim 43, wherein in said step of forming scattering regions, said scattering regions are formed of a multilayer comprising molybdenum and silicon, and wherein said multilayer conforms to sloped surfaces configured at an angle to deflect incoming radiation to avoid collection by exposure optics and to prevent printing onto a semiconductor wafer.

46. (Original) The method of claim 43, further comprising configuring said scattering regions to have roughened surfaces to deflect incoming ultraviolet radiation waves to avoid collection by exposure optics and to prevent printing onto a semiconductor wafer.

47. (Original) The method of claim 43, further comprising configuring said scattering regions to have a jagged surfaces to deflect incoming ultraviolet radiation waves to avoid collection by exposure optics and to prevent printing onto a semiconductor wafer.

48. (Original) The method of claim 43, further comprising configuring said scattering regions to have curved surfaces to deflect incoming radiation to avoid collection by exposure optics and to prevent printing onto a semiconductor wafer.